

Before the
COPYRIGHT ROYALTY JUDGES
Washington, D.C.



In the Matter of)

)
Distribution of the 2004, 2005, 2006)
2007, 2008 and 2009)
Cable Royalty Funds)
_____)

Docket No. 2012-6 CRB CD 2004-2009
(Phase II)

Received

OCT 21 2016

Copyright Royalty Board

In the Matter of)

)
Distribution of the 1999-2009)
Satellite Royalty Funds)
_____)

Docket No. 2012-7 CRB SD 1999-2009
(Phase II)

**MPAA OPPOSITION TO INDEPENDENT PRODUCERS GROUP'S
MOTION TO AMEND DIRECT STATEMENT**

The Motion Picture Association of America, Inc. ("MPAA"), on behalf of its member companies and other producers and/or distributors of syndicated movies, series, specials, and non-team sports broadcast by television stations who have agreed to representation by MPAA ("MPAA-represented Program Suppliers"), hereby submits its Opposition to the Motion To Amend Written Direct Statement ("Motion") filed by Independent Producers Group ("IPG").

On October 7, 2016, the Copyright Royalty Judges ("Judges") granted MPAA and the Settling Devotional Claimants' ("SDC") motions to strike IPG's Amended Direct Statement ("IPG ADS") filed on August 31, 2016.¹ In the course of that ruling, the Judges observed that a party may only amend a Written Direct Statement by right as set forth in Section 351.4(c) of the

¹ See Order Granting MPAA And SDC Motions To Strike IPG Amended Written Direct Statement And Denying SDC Motion For Entry Of Distribution Order at 1-5 (October 7, 2016) ("October 7, 2016 Order").

UNDERSIZED DOCUMENTS

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Judges' regulations, and reserved ruling on the question of whether (and under what circumstances) a party may file a motion seeking leave to amend its Written Direct Statement. *See* October 7, 2016 Order at 4, n.6 and 7. As expected, on October 18, 2016, IPG filed the instant Motion, which asks the Judges to exercise their discretion and permit IPG to file the IPG ADS (attached to the Motion at Exhibit A). For all the reasons set forth herein, the Judges should reject the Motion.

To be clear, MPAA does not categorically object to any party filing an amendment to its Written Direct Statement to correct genuine errors that were discovered only after the document was filed, provided that such a filing is done promptly to minimize prejudice to other parties. However, as explained in detail in the Declaration of Dr. Jeffrey S. Gray (attached hereto as Exhibit A) ("Gray Declaration"), the IPG ADS does not *merely* or *mainly* correct errors. Instead, the IPG ADS presents a new methodology to the Judges and the parties. Neither the Judges' regulations, nor the Copyright Act, permits a party to sandbag the other participants in these proceedings by submitting a new methodology out of time, and the Judges should not exercise their discretion to permit IPG to do so here. The Judges should reject IPG's disingenuous attempt to sneak in a new methodology in these proceedings under the guise of a "correction," especially where, as here, the parties are prejudiced by IPG's expert's repeated (and ongoing) attempts at a "do-over" and IPG's similar history of misconduct.² Accordingly, the Judges must reject the Motion, and the IPG ADS.

² As the Judges will recall, during the April 2015 distribution hearing in these proceedings, IPG not only attempted to admit a new methodology under the guise of rebuttal testimony, they also showed up twice with an entirely new set of so-called "replacement" exhibits which they alleged corrected errors made by their expert Dr. Laura Robinson. *See* Order Denying SDC Motions To Strike IPG Testimony And Exhibits at 2-3 and 5-6 (July 20, 2015); Order Denying In Part And Granting In Part MPAA Motions Relating To IPG Testimony And Exhibits at 4-5 (July 20, 2015). The IPG ADS is only the latest example of IPG abusing the Judges' procedural rules in these proceedings at the expense of the other parties.

ARGUMENT

I. The IPG ADS Should Not Be Permitted Because It Makes A Substantive Change To IPG's Methodology, Apart From Any Corrections.

As the Judges ruled in the October 7, 2016 Order, the IPG ADS does not comply with Section 351.4(c) of the Judges' regulations, which only permits parties to amend their Written Direct Statements as a matter of right "based on new information received during the discovery process." *See* 37 C.F.R. § 351.4(c); *see* October 7, 2016 Order at 3-4. The Judges also ruled that the IPG ADS could not be submitted under Section 351.4(b) of the Judges' regulations, because that section of the regulations cannot be used to permit a party to present a new, or modified methodology out of time. *See* 37 C.F.R. § 351.4(b); October 6, 2016 Order at 5. In so ruling, the Judges found that IPG's witness, Dr. Charles Cowan, "revised his methodology" in the IPG ADS by modifying the formulas that he used to determine the relative values of IPG programming and other parties' programming, substituting "a logarithmic relationship between the dependent and independent variables (*i.e.*, a relationship between percentage changes in those variables) for a linear relationship." *See* October 7, 2016 Order at 5.

The Judges expressly reserved ruling on the question of whether the Judges may permit a party to amend their Written Direct Statement "in appropriate circumstances," referencing SDC's position that a party may properly seek leave to amend a pleading "to correct a genuine error or mistake." *See* October 7, 2016 Order at 4, n.6. MPAA agrees with SDC that, notwithstanding the restrictive language in the regulations and the Copyright Act regarding amended Written Direct Statements,³ the Judges may exercise their discretion to permit a party to amend (or to submit an errata to) their Written Direct Statement to correct genuine errors that were not discovered prior to filing the pleading with the Judges, provided that such corrections are filed

³ *See* 37 C.F.R. § 351.4(c); 17 U.S.C. § 803(b)(6)(C)(i); *see also* Amended Joint Order On Discovery Motions at 2, n.3 (July 30, 2014).

promptly, in order to minimize prejudice to opposing parties. However, as explained in the Gray Declaration, that is not what happened here.

As Dr. Gray explains, while it is true that Dr. Cowan made “substantial data corrections” to his original expert report (“Cowan Report”) in the course of preparing his amended expert report (“Cowan Amended Report”) and the corrected version of his amended expert report now included in the IPG ADS (“Cowan Corrected-Amended Report”), Dr. Cowan also “changed the specification of the regressions he performed between the Cowan Report and the Cowan Amended Report.” See Gray Declaration at 2, ¶ 4. As Dr. Gray explains:

In the Cowan Report, Dr. Cowan’s regression models examined factors influencing the number of distant subscribers of cable and satellite systems; in the Cowan Amended report, including the Corrected-Amended Cowan Report, his regression models examined factors influencing the *natural logarithm* of the number of distant subscribers of cable and satellite systems. That is, Dr. Cowan changed the relationships he estimated in his amended reports compared to the relationships he estimated in his original report. In my opinion as an economist, estimating different mathematical relationships is tantamount to changing one’s methodological approach.

Gray Declaration at 2, ¶ 4 (emphasis in original).

IPG and Dr. Cowan both attempt to minimize this methodological change, arguing that his calculated shares “were not significantly affected” by whether he used the number of distant subscribers or the natural logarithm of the number of distant subscribers as the dependent variables in his regression models. See Motion at 5-7, and Exhibit B, Declaration of Charles Cowan (“Cowan Declaration”) at 6, ¶ 14. But, although IPG concedes that it would be possible for Dr. Cowan to do so,⁴ Dr. Cowan does not actually report the change in his royalty share calculations due solely to his decision to change his regression model specifications. See Gray

⁴ See Motion at 12 (suggesting that Dr. Cowan could “calculate his results under a ‘linear scale’ and submit such revised calculations as a matter of right under Section 351.4(b)(3) of the CRB regulations”).

Declaration at 3, ¶ 5. Instead, Dr. Cowan attempts to justify his failure to show the effects of his methodological change by asserting that the share calculations stemming from his two approaches must be similar because the R-squared from the two regression models were similar. *See id* at 3, ¶ 5 (citing Cowan Declaration at 6, ¶¶ 13-14). However, these assertions are simply incorrect.

As Dr. Gray explains, it is not only possible, but rather “expected” that Dr. Cowan’s different regressions “could generate similar R-squared statistics and yet yield materially different proposed share calculations,” given the fact that Dr. Cowan’s share calculations rely on only a small subset of his regression coefficients. *See* Gray Declaration at 3-4, ¶ 6. But, using the data and programs that IPG has now produced in discovery,⁵ Dr. Gray was able to determine what Dr. Cowan’s proposed MPAA and IPG royalty shares would have been in the Cowan Amended and Corrected-Amended Reports if Dr. Cowan had only corrected his processing errors, and not also implemented a change in his methodology. *See* Gray Declaration at 4-5, ¶¶ 7-8. The IPG Program Suppliers shares that are produced by each of Dr. Cowan’s methodologies are reported below.

⁵ IPG argues, incorrectly, that Dr. Gray received and reviewed IPG’s discovery production prior to preparing his September 15, 2016 Declaration. *See* Motion at 5, n.9 and 6. However, as Dr. Gray states expressly in his September 15, 2016 Declaration, he had not yet received or reviewed IPG’s discovery before preparing that declaration, and thus at that time he could not “determine what portion of the changes in Dr. Cowan’s allocations are due to Dr. Cowan’s errors and what portion of the changes are due to Dr. Cowan’s change in methodology.” *See* MPAA Reply To IPG Opposition To MPAA Motion To Strike, at Exhibit A, September 15, 2016 Gray Declaration at 4, ¶ 7 (September 16, 2016).

Table 1: Dr. Cowan's IPG Share Allocations Based On Dr. Cowan's Corrected Data Using Dr. Cowan's Original and Updated Regression Methodologies

<i>Royalty Year</i>	<i>Cowan Linear Specification (Cable)</i>	<i>Cowan Log Specification (Cable)</i>	<i>Cowan Linear Specification (Satellite)</i>	<i>Cowan Log Specification (Satellite)</i>
2000			36.26%	11.14%
2001			36.22%	9.79%
2002			36.17%	8.81%
2003			35.86%	7.08%
2004	37.61%	12.13%	36.40%	5.77%
2005	37.01%	10.46%	35.94%	7.09%
2006	37.53%	12.68%	35.77%	10.64%
2007	37.16%	11.01%	35.47%	12.47%
2008	37.23%	11.38%	35.56%	8.08%
2009	35.58%	6.95%	35.95%	6.69%

Notes: Calculations based on applying estimated coefficients from Cowan's linear specification and Cowan's log-linear ("log") specification models to Cowan calculation of share spreadsheets, "Calculation of Share_Orig.xlsx" and "Calculation of Share.xlsx", respectively. While I report these calculations, I do not believe they represent reasonable or reliable proposed share calculations. The share calculations based on the Cowan log specification replicate those presented in Tables 3 and 4 from the Cowan-Corrected Amended Report.

See Gray Declaration at 5, ¶ 8.

As Dr. Gray explains, Dr. Cowan's cable share allocations for IPG in the Program Suppliers category are approximately 66% to 80% lower using the natural logarithm methodology reported in the IPG ADS, and IPG's satellite share allocations in the Program Suppliers category are approximately 65% to 84% lower using the natural logarithm methodology reported in the IPG ADS. *See id.* at 5, ¶ 8. These significant disparities in the results demonstrate that, contrary to IPG's assertions, Dr. Cowan's substitution of the logarithmic for the linear calculations "had a significant impact on his findings," causing material differences in the share allocations Dr. Cowan calculated, independent of the impact caused by his data corrections. *See id.* at 5-6, ¶¶ 9-10.

While MPAA agrees that the Judges may properly exercise their discretion to allow the prompt correction of genuine errors in a party's Written Direct Statement, the methodological

change that IPG seeks to make presents a very different question. Neither the Judges' regulations, nor the Copyright Act supports permitting such a substantive amendment to a party's Written Direct Statement out of time, and IPG has cited no supporting authority. As a result, the IPG ADS presenting a modified methodology should not be permitted.

II. MPAA Is Prejudiced By IPG's Repeated Attempts To Change Its Experts' Results In These Proceedings.

IPG argues that MPAA and SDC were not prejudiced by its submission of the IPG ADS because the IPG ADS was served the day before discovery requests were due in these proceedings, and thus MPAA and SDC were afforded an opportunity to review the pleading and formulate discovery requests. *See* Motion at 7-9. But IPG's suggestion that MPAA suffered no prejudice due to the filing of the IPG ADS is simply incorrect.

First, as the Judges observed in the October 7, 2016 Order, the changes made in the IPG ADS were not readily discernible, and no explanation of the changes was provided by IPG. *See* October 7, 2016 Order at 2 and 5, n.7. Accordingly, MPAA was compelled to expend resources engaging its expert witness, Dr. Gray, to review the IPG ADS and determine what changes were made, and was also forced to incur additional legal expenses associated with its attorneys having less than twenty-four hours to review the IPG ADS and formulate discovery requests. Clearly, MPAA suffered prejudice due to the untimely filing of the IPG ADS.

Second, to make matters worse, when IPG was finally forced to provide some information regarding the changes made in the IPG ADS in the context of responding to MPAA's Motion To Strike Amended Direct Statement Of IPG ("MPAA Motion To Strike"), IPG attempted to mischaracterize the significance of the changes in the IPG ADS, falsely describing them as "typographical errors" in Dr. Cowan's formulas rather than methodological changes. *See* IPG Opposition to MPAA Motion To Strike at 2. IPG's lack of candor further

prejudiced MPAA, as it forced MPAA to expend more time and resources to determine what exactly Dr. Cowan modified in the IPG ADS.⁶ Even now, while IPG finally admits that Dr. Cowan did make a change in his regression model in the IPG ADS, IPG still refuses to be candid regarding the significance of that change. *See* Motion at 2-7, Cowan Declaration at 3-7, ¶¶ 6-14. The Judges should not permit IPG to benefit from its own obfuscation in these proceedings, especially when, as here, that conduct prejudices the other parties.

Third, despite IPG's assertion in its Opposition to MPAA's Motion To Strike that the changes that were made in the IPG ADS were "few and obvious," and had all been disclosed by IPG, *see* IPG Opposition To MPAA Motion To Strike at 2, IPG now reveals for the first time in the Motion that Dr. Cowan actually made *additional* data corrections to achieve the IPG ADS royalty shares for the Program Suppliers category that were not previously disclosed by IPG, and which are not readily apparent from the face of the IPG ADS. As IPG states in the Motion:

As reflected by comparison of Tables 3 and 4 in the Direct Statement and AWDS, significant changes occur in the percentage figures in the program suppliers category, where the percentages attributed to IPG have now been significantly reduced. The most significant explanation for this change is not reflected in either the Direct Statement or AWDS, but is due to a problem discovered in the identification of MP AA programming and processing of that information.

See Motion at 4. Clearly, IPG must have known that these significant data corrections were made prior to the first filing of the IPG ADS on August 31, 2016, and yet IPG chose not to disclose the nature of changes that were "not reflected" on the fact of the IPG ADS to MPAA, forcing MPAA to expend both time and resources to try to determine what changes Dr. Cowan had made in the IPG ADS and why he made them. IPG's decision to not disclose the full extent

⁶ Indeed, the Judges observed that in the IPG ADS "Dr. Cowan describes neither the errors nor how he corrected them by changing his formulas." *See* October 7, 2016 Order at 5, n.7.

of its data corrections until now, *more than a month* after the IPG ADS was initially filed not only prejudices MPAA, it is rank gamesmanship. The Judges should not permit IPG to benefit from such dishonest conduct by now allowing the IPG ADS.

Finally, in weighing prejudice, the Judges must consider the IPG ADS in context. As the Judges are well aware, this is just the most recent incident in a long line of procedural violations by IPG in royalty distribution proceedings.⁷ Unbelievably, IPG has conceded that the IPG ADS was necessary because IPG's counsel "did not review or consider Dr. Cowan's report prior to its submission." Motion at 3, n.5, and 10, Cowan Declaration at 2, ¶ 4. IPG should not be permitted to benefit from its counsel's own omissions—especially when this is just yet another example of IPG's disregard of the Judges' procedural rules in these proceedings to the detriment of the other parties and the Judges. As the Judges will recall, IPG engaged in similar behavior earlier in this very proceeding, submitting two different rounds of so-called "replacement" hearing exhibits to the parties for the first time in the middle of the Judges' April 2015 distribution hearing, all to supposedly correct errors in Dr. Laura Robinson's calculations.⁸ It is apparent that IPG is engaged in an ongoing pattern of attempting to "replace" or "amend" its expert witnesses' conclusions in order to align those conclusions with IPG's preconceived expectations—without any regard for the considerable prejudice incurred by other parties who are forced to respond to such untimely shenanigans. The Judges should not reward IPG for such conduct by allowing the IPG ADS.

⁷ See Order, Docket Nos. 2001-8 CARP CD 98-99 *et al.*, at 5-6 (June 26, 2006) (recognizing IPG's "persistent failure to comply" with the Copyright Office's procedural regulations, and holding that future regulatory transgressions "will result in IPG's dismissal from these proceedings").

⁸ See Order Denying SDC Motions To Strike IPG Testimony And Exhibits at 2-3 and 5-6 (July 20, 2015); Order Denying In Part And Granting In Part MPAA Motions Relating To IPG Testimony And Exhibits at 4-5 (July 20, 2015).

III. IPG Misstates The Purpose Of Written Rebuttal Statements.

At the conclusion of the Motion, IPG threatens to simply include Dr. Cowan's conclusions based on a logarithmic scale in IPG's Written Rebuttal Statement if they are not permitted in the IPG ADS, suggesting that MPAA and SDC's arguments are really "much ado about nothing." *See* Motion at 11-12. However, this argument is based on a fundamental misunderstanding of the purpose of the Written Rebuttal Statement. As the Judges have ruled more than once, no party may present a new methodology in its Written Rebuttal Statement that was not properly presented in its timely-filed Written Direct Statement. *See* October 7, 2016 Order at 5; April 16, 2015 Tr. at 165-66; Order Denying SDC Motions To Strike IPG Testimony And Exhibits at 2-3 (July 20, 2015); 78 Fed. Reg. 64984, 65003-04 (October 30, 2013). While the Judges have sometimes instructed the parties to include revised royalty shares in their Written Rebuttal Statements incorporating the Judges' rulings in preliminary hearing orders, *see, e.g., Memorandum Opinion And Ruling On Validity And Categorization Of Claims* at 45 (March 13, 2015), such rulings did not invite parties to submit a new methodology out of time in order to "respond to criticisms raised by adverse parties" as IPG seems to suggest. *See* Motion at 12. Accordingly, the Judges should reject IPG's argument.

CONCLUSION

For all of the foregoing reasons, the Judges should deny the Motion, and not permit the filing of the IPG ADS.

Respectfully submitted,

**MPAA-REPRESENTED PROGRAM
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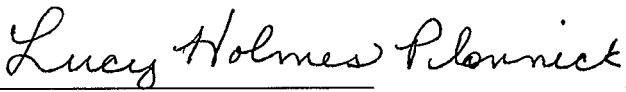
Dated: October 25, 2016

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of October, 2016, a copy of the foregoing pleading was sent by Federal Express overnight mail to the party listed below.

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EXHIBIT A

**Before the
LIBRARY OF CONGRESS
Copyright Royalty Judges**

<i>In re</i> DISTRIBUTION OF 2004, 2005, 2006, 2007, 2008 and 2009 Cable Royalty Funds	DOCKET NO. 2012-6 CRB CD (2004-2009) (Phase II)
<i>In re</i> DISTRIBUTION OF 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 AND 2009 Satellite Royalty Fund	DOCKET NO. 2012-7 CRB SD 1999-2009 (Phase II)

DECLARATION OF JEFFREY S. GRAY, PH.D.

I, Jeffrey S. Gray, Ph.D., hereby state under penalty of perjury that:

1. I am over eighteen (18) years of age and am employed as President of Analytics Research Group, LLC. I have been retained by the Motion Picture Association of America, Inc. ("MPAA") to serve as an expert witness in the captioned consolidated proceedings. I have personal knowledge of the following facts and, if called and sworn as a witness, could and would competently testify thereto.

2. After reviewing both the Direct Statement of Independent Producers Group ("IPG") filed on August 22, 2016, which included the Expert Report of Charles D. Cowan, Ph.D. ("Cowan Report") and the Amended Direct Statement of IPG filed on August 31, 2016, which included Dr. Cowan's Amended Expert Report ("Cowan Amended Report"), I concluded in my Declaration dated September 15, 2016, which MPAA submitted in connection with its Reply To IPG's Opposition To MPAA's Motion to Strike Amended Direct Statement Of IPG, that Dr.

Cowan made substantive changes to his methodology by changing the specifications of the economic models he estimated in his two reports that were unrelated to any data corrections. The substantive changes involved Dr. Cowan changing the left hand side of the equations he estimated from the number of distant subscribers to the natural logarithm of the number of distant subscribers.

3. Since my September 15, 2016 Declaration was filed, I have reviewed the IPG Motion to Amend Direct Statement filed on October 17, 2016, which included Dr. Cowan's Amended Expert Report dated October 13, 2016 ("Cowan Corrected-Amended Report") and the Declaration of Dr. Charles Cowan dated October 17, 2016 ("Cowan Declaration"). I have also received and reviewed electronic discovery documents produced by IPG in this proceeding.

4. Dr. Cowan states that because he performed regressions in his original report and performed regressions in his amended reports, his "methodology" did not change between the Cowan Report and the Cowan Amended Report. *See* Cowan Declaration at 3, ¶ 7-8. Dr. Cowan's statement is incorrect. In addition to the substantial data corrections Dr. Cowan describes (*see id.* at 2, ¶ 4-5), Dr. Cowan changed the specification of the regressions he performed between the Cowan Report and the Cowan Amended Report. In the Cowan Report, Dr. Cowan's regression models examined factors influencing the number of distant subscribers of cable and satellite systems; in the Cowan Amended report, including the Corrected-Amended Cowan Report, his regression models examined factors influencing the *natural logarithm* of the number of distant subscribers of cable and satellite systems. That is, Dr. Cowan changed the relationships he estimated in his amended reports compared to the relationships he estimated in his original report. In my opinion as an economist, estimating different mathematical relationships is tantamount to changing one's methodological approach.

5. Dr. Cowan should have reported the change in his royalty share calculations due solely to his changing regression model specifications, but he did not. Instead, he claims that his calculated shares “were not significantly affected” whether he used the number of distant subscribers or the natural logarithm of the number of distant subscribers as the dependent variables in his regression models. *See id.* at 6, ¶ 14. Dr. Cowan also suggests that he did not report the impact on share calculations of switching to using the natural logarithm of distant subscribers as the dependent variable because the R-squared from the regressions using the number of distant subscribers and the regressions using the natural logarithm of the number of distant subscribers were relatively similar to his share calculations stemming from the two sets of models must also be similar. *See id.* at 6, ¶ 13-14. These claims are also incorrect.

6. Based upon his own proposed methodology, Dr. Cowan’s calculated shares depend on the relative change in the number of distant subscribers that result from changes in the amount of MPAA- or IPG-represented programming (*see* Cowan Amended Report at 9, ¶ 36, referring to the relevant coefficients as being “g” and “h” in his equation (1) presented earlier in his report, *see id.* at 8, ¶ 32). However, the R-squared from a regression is a statistic that measures the proportion of the variance in the dependent variable (*i.e.*, the number of distant subscribers) that is explained by the variation in *all* the independent variables in the model. In addition to a constant term in each regression, Dr. Cowan’s cable regressions have an additional 501 independent variables and his satellite regressions have an additional 321 independent variables. Variations in these other variables help predict the number of distant subscribers and therefore increase the R-squared of the regressions. It would certainly be possible, even expected, that Dr. Cowan’s different regressions could generate similar R-squared statistics yet yield materially different proposed share calculations. This is because Dr. Cowan’s share

calculations rely on a small subset of his regression coefficients. As demonstrated below, this is the case with Dr. Cowan's original and amended regression models.

7. To be clear, as an initial matter, I find (1) Dr. Cowan's original models that estimated the relationship between the number of distant subscribers and various factors, and (2) Dr. Cowan's amended models, that estimated the relationship between the natural logarithm of the number of distant subscribers and various factors, both fail to provide reasonable or reliable estimates of the economic value of distantly retransmitted programming. Moreover, I find the description of Dr. Cowan's proposed methodology to calculate royalty shares in each of his reports to be unclear.¹ Nonetheless, based upon the data and programs that have now been provided in discovery, I have replicated his regression coefficients based on his log-linear model,² as well as the proposed MPAA and IPG royalty shares he reported in the Cowan Corrected-Amended Report.³ By repeating Dr. Cowan's regressions using the same exact corrected data, yet using the number of distant subscribers as the dependent variables, and applying the associated regression coefficients to his program calculating royalty shares, I am able to determine what Dr. Cowan's proposed MPAA and IPG royalty shares would have been in his amended reports had he only "engaged in a correction of the processing of the data" (*see* Cowan Declaration at 7, ¶ 16) and not also made a significant methodological change by changing his regression specifications.

¹ Dr. Cowan however asserts that "[t]he methodology [he] used was well explained". *See id.* at 1, ¶ 3.

² I refer to Dr. Cowan's model where the dependent variable is the natural logarithm of the number of distant subscribers as his "log-linear" model.

³ In the Cowan Corrected-Amended Report, Dr. Cowan describes these calculations as the relative split in the number of distant subscribers, in the Cowan Declaration the calculations are suggested to be "allocated percentage shares" Cowan Declaration at 6, ¶ 14.

8. The third and fifth columns in Table 1 below present Dr. Cowan's share allocations for IPG based upon his log-linear regression specification, that is, when the natural logarithm of the number of distant subscribers are used as the dependent variables in Dr. Cowan's cable and satellite regressions, respectively. These shares are identical to those reported in the Cowan Corrected-Amended Tables 3 and 4, indicating I am able to replicate Dr. Cowan's results. The second and fourth columns report what Dr. Cowan's share allocations for IPG would have been had he made his data corrections yet not changed his regression specification; that is, repeating his regressions using the number of distant subscribers as the dependent variables. Dr. Cowan's cable share allocations for IPG are approximately 66% to 80% lower, and his satellite share allocations for IPG are approximately 65% to 84% lower, when using the natural logarithm of the number of distant subscribers as the dependent variables in his regression specifications.

Table 1: Dr. Cowan's IPG Share Allocations Based On Dr. Cowan's Corrected Data Using Dr. Cowan's Original and Updated Regression Methodologies

<i>Royalty Year</i>	<i>Cowan Linear Specification (Cable)</i>	<i>Cowan Log Specification (Cable)</i>	<i>Cowan Linear Specification (Satellite)</i>	<i>Cowan Log Specification (Satellite)</i>
2000			36.26%	11.14%
2001			36.22%	9.79%
2002			36.17%	8.81%
2003			35.86%	7.08%
2004	37.61%	12.13%	36.40%	5.77%
2005	37.01%	10.46%	35.94%	7.09%
2006	37.53%	12.68%	35.77%	10.64%
2007	37.16%	11.01%	35.47%	12.47%
2008	37.23%	11.38%	35.56%	8.08%
2009	35.58%	6.95%	35.95%	6.69%

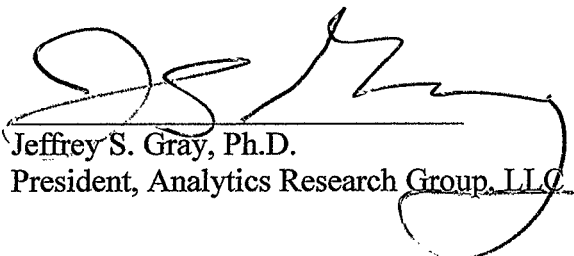
Notes: Calculations based on applying estimated coefficients from Cowan's linear specification and Cowan's log-linear ("log") specification models to Cowan calculation of share spreadsheets, "Calculation of Share_Orig.xlsx" and "Calculation of Share.xlsx", respectively. While I report these calculations, I do not believe they represent reasonable or reliable proposed share calculations. The share calculations based on the Cowan log specification replicate those presented in Tables 3 and 4 from the Cowan-Corrected Amended Report.

9. The results presented in Table 1 support my position that Dr. Cowan is incorrect in stating that his R-squared comparisons demonstrated “*mathematically* that [his] allocated percentage shares to IPG, MPA, and the SDC, were not significantly affected [by] the use of logarithmic versus linear scaling” (emphasis in original, *see* Cowan Declaration at 6, ¶ 14). While the R-squared statistics from his linear and log-linear regression models may be similar, his resulting share allocations are materially different. That is, contrary to his assertions, Dr. Cowan’s shifting to analyzing the natural logarithm of the number of distant subscribers had a significant impact on his findings.

10. Thus, after having reviewed the Cowan Corrected-Amended Report, the Cowan Declaration, and IPG’s discovery production, the conclusions presented in my September 15, 2016 Declaration are unchanged. Dr. Cowan made significant and substantive changes to the specifications of the models he estimated in his amended reports compared to his original report. These changes caused material differences in the share allocations he calculated, independent of the impact caused by the data corrections he also made.

I declare under penalty of perjury under the laws of the District of Columbia that the foregoing is true and correct, and of my personal knowledge.

Executed this, 25th day of October, 2016, at Washington, District of Columbia.



Jeffrey S. Gray, Ph.D.
President, Analytics Research Group, LLC